FINAL DECISION AND RESPONSE TO COMMENTS
SELECTION OF REMEDIAL ALTERNATIVE
FOR
JOHNSON CONTROLS, INC.
(FORMER STANLEY TOOLS FACILITY)
FOWLERVILLE, MICHIGAN
MID 099 124 299

Introduction

This RCRA Response to Comments (RTC) and Final Decision (FD) is presented by the United States Environmental Protection Agency (U.S. EPA) for the Johnsons Controls, Inc. site located in Fowlerville, Michigan. The purpose of this document is to identify the selected remedy, present concerns and issues raised during the public comment period, and provide responses. It consists of the previously issued Statement of Basis (Attachment I), and the Administrative Record (Attachment II). All of the comments received were carefully reviewed during the selection of the remedy, and have been answered in this RTC. The Statement of Basis provided the proposed remedy and was made available for public review and comment on August 31, 2006 through October 24, 2006. This FD supports the proposed remedy based on the Administrative Record (Attachment II). No additional alternatives were raised that were not considered in the Corrective Measures Study Report (CMS) and the proposed remedy was not altered as a result of public comments.

Assessment of the Facility

The response action documented in this Final Decision is necessary to protect human health and the environment.

Selected Remedies

The selected remedies for the site address past releases of chemical contaminants to soil, groundwater and sediments from manufacturing operations conducted from 1949 until 1985 when manufacturing operations at the facility ceased. The proposed remedies focus on reducing human and ecological exposure to contaminated media through removal of contaminated soils and sediments, the use of institutional controls, and monitoring the attenuation of contaminant concentrations in groundwater over time. Johnson Controls, Inc. (JCI), conducted Interim Remedial Measures in 2003 that consisted of removing and disposing of 83,900 tons of soil contaminated with volatile organic compounds (VOC's), metals, polychlorinated biphenyls (PCBs) and polycyclic aromatic hydrocarbons (PAH's). Contaminated soil was excavated to the beginning of groundwater depth from areas across the facility property and from two areas referred to as the North Ditch and South Ditch, which feed into the Red

Cedar River. The excavated soil material was disposed off-site in an approved landfill. Clean soil used to replace contaminated soil was backfilled in the excavated areas to original grade.

- Implement Institutional Controls for Contaminated Soils.
  Institutional controls will restrict future facility uses to industrial purposes. Institutional controls would consist of deed restrictions, local ordinances and/or zoning that would limit the future use of the property and ensure that any direct human exposure to on-site soils would be so incidental as to pose little or no health threat . To the extent future conveyances of the facility property or any portion of it are planned, the institutional controls would ensure that the transferees were aware of, and bound by, the restriction.

- Implement Institutional Controls, Deed Restrictions and Long-Term Monitoring for Groundwater
  Institutional controls will consist of deed restrictions, and/or zoning or other local ordinances devised to prohibit the extraction of groundwater for consumptive or irrigation purposes in areas affected by the contaminant plume. Such controls would be implemented to prohibit the placement of potable or irrigation wells, limit excavations below the water table, and/or limit land uses to commercial and industrial development. Future redevelopment would be limited to industrial uses, disclosure of potential hazards would be provided to current and future on-site construction workers through a Health and Safety Plan, and any use of groundwater would be prohibited. Periodic review of institutional controls will ensure that future facility use is limited to activities that do not pose an unacceptable human health risk

- Monitored Natural Attenuation (MNA), and Mixing Zone Determination for Groundwater
  MNA consist of routine monitoring of the contaminant plume in accordance with an approved RCRA Groundwater Monitoring Program Plan. The Michigan Department of Environmental Quality (MDEQ) has completed a Mixing Zone Determination that has established maximum allowable contaminant concentrations in groundwater at compliance well locations specified near the Red Cedar River. Monitoring would continue until attenuation achieves groundwater cleanup goals. The applicable groundwater cleanup goals for on-site groundwater are the Michigan Department of Environmental Quality (MDEQ), Final Acute Values and the Part 201 Generic Groundwater/Surface Water Interface (GSI) Criteria. The MDEQ has established "Final Acute Values" which are maximum allowable chemical concentrations in groundwater that are protective of the environment. Selected monitoring wells will be analyzed for VOC's, Michigan 10 metals (plus nickel and hexavalent chromium), cyanide and Monitored Natural Attenuation (MNA) parameters.

The proposed monitoring program would protect human and ecological health in the future by assessing the concentration, migration and attenuation of hazardous constituents in groundwater.

- Excavation of Red Cedar River Sediments
  Areas of river sediments that are contaminated at levels considered unsafe for aquatic animals would be removed from the river. The degree of cleanup in the river sediments are based on the goal of protecting the animals that live part or all of their lives in the sediment ("benthic organisms"), which are important in the food chain of the river's ecosystem. Cleaning up sediments to protect the benthic organisms is expected to benefit the fish, birds, and mammals that inhabit or feed in the river; this will also help to keep the surface water clean.
  Red Cedar River sediments will be tested in a laboratory to further evaluate their level of toxicity, in order to isolate the areas of sediment that will be removed and to establish site-specific cleanup goals. Interim Measures completed in 2003 included the excavation and backfilling of the North Ditch and South Ditch, which drain into the Red Cedar River. EPA believes that the removal of contaminated ditch sediments has eliminated the inflow of contaminated sediments to the river.

Public Participation Activities

The public comment period was announced through a newspaper advertisement, radio advertisements and online at the EPA website located at, http://www.epa.gov/reg5rcra/wptdiv/permits/index.htm. The public comment period ran from August 31, 2006, through October 24, 2006. The Statement of Basis (SB) and the supporting Administrative Record were placed in the Fowlerville District Public Library in Fowlerville, Michigan, and the U.S. EPA, Region 5, Waste, Pesticides, and Toxics Division Records Center for public review at the start of the public comment period.

Public Comments and Concerns

Public comment was received from company representatives during the comment period. The public comments received addressed a couple of historical inaccuracies as presented in the Statement of Basis Document and are noted below.

Comment: "Buildings at the facility were demolished in 1993, and no structures of any type remain. The facility currently consists of a relatively flat grassy field. Johnson Controls, Inc. ("JCI") currently owns the facility." However, in 2005 Johnson Controls sold the eastern approximately 5 acres (the portion which lies outside the approximate floodplain) to American Compounding Specialties, LLC, which has constructed a plastics manufacturing plant on the property. EPA received notification of the transaction pursuant to the consent order.

Response: Comment Noted.

Comment: In the first paragraph of section 3.0, the text states: "JCI purchased the facility in 1985." Actually, JCI purchased the facility from Stanley in 1996…..

Response: Comment Noted.

Administrative Record

The Administrative Record upon which the final remedy was selected is available at the Fowlerville District Public Library in Fowlerville, Michigan, and the Waste, Pesticides and Toxics Division Records Center of the U.S. EPA, Region 5 offices. Attachment II identifies the documents contained within the Administrative Record.

Future Actions

Within 45 days of receipt of this Final Decision and Response to Comments, Johnsons Controls, Inc., must submit a Corrective Measures Implementation Program Workplan for U.S. EPA's approval. Within 30 days of U.S. EPA's approval of the workplan, Johnsons Controls, Inc. must commence the work. During the remedy implementation period, U.S. EPA will provide information to the public by updating the Administrative Record and conducting meetings, as requested.

Declarations

Based on the Administrative Record compiled for this corrective action, U.S. EPA has determined that the selected remedy for the Johnsons Controls, Inc, site is appropriate and protective of human health and the environment.

Date: 12/1/06

for

Margaret M. Guerriero, Division Director
Waste, Pesticides and Toxics Division
U.S. EPA, Region 5

Attachments